

ADDITIONS TO THE GENUS *CROSSOTHAMNUS* FROM COLOMBIA AND  
ECUADOR (ALOMIINAE: EUPATORIEAE: ASTERACEAE)

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ABSTRACT

Four species are recognized in *Crossothamnus*, including *C. gentryi* described from Ecuador and *C. killipii* of Colombia -- transferred from *Condylopodium*.

KEY WORDS: Asteraceae, Eupatorieae, Alomiinae, *Crossothamnus*, *Condylopodium*, Colombia, Ecuador, Perú

*Crossothamnus* and *Condylopodium*, two Andean genera related to *Brickellia* (subtribe Alomiinae), were established by King & Robinson in 1972 (a, b) and retained unchanged in the generic review of the Eupatorieae by King & Robinson in 1987. Their separation from each other depended primarily on habit and achene pubescence with some consideration of geography. At that time, *Condylopodium* included four species, was known only from Colombia and the single species of *Crossothamnus*, *C. weberbaueri* (Hieron.) R.M. King & H. Rob., was known only from Perú. Complications first arose when Turner & Dillon (1990), described a new species, *Crossothamnus pascoanus* Dillon & Turner, from Perú and questioned the distinctions between the genera *Crossothamnus* and *Condylopodium*. New material from Ecuador described here as a new species further complicates the issue. The new species is described here as a *Crossothamnus* and, as suggested by Turner & Dillon (1990) the Colombian *Condylopodium killipii* R.M. King & H. Rob. is also added to the genus. In the present view, *Condylopodium* is restricted to three species having hairs on the base of their style and acuminate leaf tips, while *Crossothamnus* has an enlarged but glabrous style base and obtuse leaf tips.

The expanded genus *Crossothamnus* occurs in Colombia, Ecuador, and Perú. *Condylopodium* was originally known only from Colombia, but it has since been collected in Ecuador. The two Ecuadorian specimens of *Condylopodium fuliginosum* (H.B.K.) R.M. King & H. Rob. are: ECUADOR. Azuay: carretera Paute Guarumales, sector Amaluisa Parroquia Palmas, cantón Paute, colecciones en Pica Guarumales Mendaz hasta finca del Sr. Absalón Bravo, área lluviosa y nublada, 9 Agosto 1983, J. Jaramillo 5650 (GB); Napo: El Chaco Cantón, Faldas al sur del

Volcán Reventador, margen izquierda del Río Reventador, 77° 36' W 00° 07' S, 1600-1850 m, 11 Oct. 1990, W. Palacios 6189 (MO, QCNE, US).

The taxonomic alterations in *Crossothamnus* are as follows:

*Crossothamnus killipii* (R.M. King & H. Rob.) R.M. King & H. Rob., *comb. nov.* BASIONYM: *Condylododium killipii* R.M. King & H. Rob., *Phytologia* 24:399. 1972.

*Crossothamnus gentryi* R.M. King & H. Rob., *spec. nov.* TYPE: ECUADOR. Morona-Santiago: Campamento Achupalla, Cordillera del Cóndor, 15 km east of Gualaquiza, open bromeliad sward with scattered shrubs and small trees, 03° 27' S, 78° 22' W, 2090 m, 25 July 1993, A. Gentry 80440 (HOLOTYPE: US; Isotype: MO).

Plantae erectae arborescentes 3 m altae; caules atrescentes dense nigropilosi, internodiis 1-2 cm longis. Folia opposita, petiolis 2-5 mm longis; laminae coriaceae oblongo- vel anguste ellipticae 3.5-5.5 cm longae 1.3-2.0 cm latae base et apice anguste rotundatae vel obtusae margine integrae supra viridibrunneae plerumque glabrae in nervis primariis minute puberulae subtus brunneae dense pilosulae obscure glandulo-punctatae, nervis secundariis irregulariter pinnatis mediocriter ascendentibus utrinque ca. 6-8, nervis et nervulis subtus distincte exsculptatis. Inflorescentiae terminales subcorymbosae multiglomerulatae, pedunculis brevibus 1-2 mm longis puberulis. Capitula campanulata ca. 1 cm alta et 0.3 cm lata; bractae involucri ca. 18 subimbricatae ca. 5-seriatae gradatim ovatae vel anguste oblongae chartaceae 1-7 mm longae apice rotundatae dense ciliatae extus multistriatae distaliter puberulae. Flores 4 or 5 in capitulo; corollae violaceae anguste infundibulares ca. 7 mm longae extus glabrae vel perpaucis minute glanduliferae, tubis ca. 3 mm longis, faucibus ca. 3 mm longis, lobis ca. 1 mm longis et 0.5 mm latis intus et extus laevibus in cellulis elongatis; thecae antherarum ca. 1.7 mm longae, appendices apicales antherarum ovato-oblongae ca. 0.3 mm longae et 0.2 mm latae; base stylorum distincte nodulosi glabri, rami stylorum sensim clavati. Achenia anguste prismatica 3.0-3.5 mm longa plerumque glabra superne sparce breviter spiculifera, carpodia breviter cylindrica; setae pappi ca. 35 sordide flavescens ca. 7 mm longae longiores distaliter latiores et scabridiores. Grana pollinis in diametro ca. 25 µm.

The species is named after the collector, the late Dr. Alwyn Gentry.

*Crossothamnus gentryi* is distinguished by the narrowly elliptical or oblong leaves, the mostly glabrous but partly setuliferous rather than strictly glanduliferous achenes, and the sessile clusters of heads in the inflorescence. The closest relationship is to *C. pascoanus* of Perú, but the leaves of the new species are narrowly oblong-elliptical rather than broadly elliptical, and the heads have 4 or 5 rather than 6-8 florets.

The four species of *Crossothamnus* can be distinguished by the following key.

- 1a. Inflorescence thyrsoid with thyrsoid or fasciculate branches, heads not in glomerules; corollas and achenes with scattered glands on outer surface, sometimes numerous; tips of pappus bristles not or slightly broadened. .... 2

- 2a. Leaves ovate, broadest near base, with crenulate or slightly serrulate margins, upper surface glabrous, lower surface obscured by pale hairs; petioles short or lacking; involucre bracts with rounded tips, multicostate..... *C. weberbaueri*
- 2b. Leaves oblong to elliptical, broadest near the middle, with entire margins, surfaces sparsely pilose, lower surface not obscured by hairs; petioles to over 1 cm long; involucre bracts often acute, bicostate. .... *C. killipii*
- 1b. Inflorescence with heads in glomerules on congested rounded corymbs; corollas essentially glabrous; achenes glabrous or with short setulae above; tips of longer pappus bristles distinctly broadened.....3
- 3a. Leaves broadly elliptical, 2.5-5.0 cm wide, lower surfaces moderately pilosulous; heads with 6-8 florets..... *C. pascoanus*
- 3b. Leaves narrowly elliptical or oblong, 1.3-2.0 cm wide, lower surfaces densely pilosulous; heads with 4 or 5 florets. .... *C. gentryi*

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